

WHAT IS CLAIMED IS:

- 1 1. A method of collecting an electronic signature for an electronic
2 record stored in a database, the method comprising:
3 automatically creating an electronic record from data stored in a
4 plurality of different database tables in response to the occurrence of a predetermined
5 event;
6 storing an instance of the electronic record in a common repository of
7 electronic records that provides an audit trail that cannot be altered or disabled by users
8 of the system;
9 executing a rule associated with the electronic record to determine
10 whether an electronic signature is required to connote review and/or approval of the
11 electronic record; and
12 if execution of the rule results in a determination that an electronic
13 signature is required, marking the instance of the electronic record as unsigned and
14 initiating a request to collect the required electronic signature.
- 1 2. The method of claim 1 further comprising receiving an electronic
2 signature from the user; verifying the electronic signature; and in response to a positive
3 verification of the electronic signature, marking the electronic record as signed.
- 1 3. The method of claim 2 wherein the electronic record is stored in
2 a common repository of electronic records that provides an audit trail that cannot be
3 altered or disabled by users of the database.
- 1 4. The method of claim 1 wherein the electronic record comprises
2 unstructured data in a character large object (CLOB) format.
- 1 5. The method of claim 3 wherein the unstructured data comprises a
2 well-formed XML document stored within a column of a table stored in the database.
- 1 6. The method of claim 4 wherein fields of the electronic record are
2 filled with XML data based on a predefined mapping to multiple data sources.

1 7. The method of claim 1 further comprising the step of, if
2 execution of the rule results in a determination that an electronic signature is required,
3 displaying data from the electronic record on a computer display.

1 8. The method of claim 7 wherein data from the electronic record is
2 display according to a predefined layout set forth in an XSL style sheet.

1 9. The method of claim 1 wherein the rule requires a plurality of
2 different electronic signatures and wherein, if execution of the rule results in a
3 determination that a plurality of electronic signatures are required, requesting the
4 plurality of electronic signatures.

1 10. The method of claim 1 wherein the electronic record is initially
2 marked as unsigned by setting an appropriate attribute associated with a database table
3 in which at least part of the record is stored.

1 11. A computer system that manages electronic records stored in a
2 database, the computer system comprising:

3 a processor;

4 a database; and

5 a computer-readable memory coupled to the processor, the

6 computer-readable memory configured to store a computer program;

7 wherein the processor is operative with the computer program to:

8 (i) automatically create an electronic record from data stored in
9 a plurality of different database tables in response to the occurrence of a
10 predetermined event;

11 (ii) store an instance of the electronic record in a common
12 repository of electronic records that provides an audit trail that cannot be altered
13 or disabled by users of the system;

14 (iii) execute a rule associated with the electronic record to
15 determine whether an electronic signature is required to connote review and/or
16 approval of the electronic record; and

17 (iv) mark the instance of the electronic record as unsigned and
18 initiate a request to collect the required electronic signature if execution of the
19 rule results in a determination that an electronic signature is required.

1 12. The computer system of claim 11 wherein the electronic record
2 is stored in a common repository of electronic records that provides an audit trail that
3 cannot be altered or disabled by users of the system.

1 13. The computer system of claim 12 wherein the electronic record
2 comprises unstructured data in a character large object (CLOB) format.

1 14. The computer system of claim 13 wherein the unstructured data
2 comprises a well-formed XML document stored within a column of a table stored in the
3 database.

1 15. The computer system of claim 14 wherein fields of the electronic
2 record are filled with XML data based on a predefined mapping to multiple data
3 sources.

1 16. The computer system of claim 11 wherein the processor and
2 computer program are further operative to obtain and verify the electronic signature,
3 and thereafter, mark the electronic record as signed.

1 17. The method of claim 16 wherein the processor and computer
2 program are further operative to initially mark the electronic record as unsigned by
3 setting an appropriate attribute associated with a database table in which at least part of
4 the record is stored.

1 18. A computer program stored on a computer-readable storage
2 medium for managing electronic records stored in a database, the computer program
3 comprising:

4 code for automatically creating an electronic record from data stored in a
5 plurality of different database tables in response to the occurrence of a predetermined
6 event;

7 code for storing an instance of the electronic record in a common
8 repository of electronic records that provides an audit trail that cannot be altered or
9 disabled by users of the system;

10 code for executing a rule associated with the electronic record to
11 determine whether an electronic signature is required to connote review and/or
12 approval of the electronic record; and

13 code for marking the instance of the electronic record as unsigned and
14 initiating a request to collect the required electronic signature if execution of the rule
15 results in a determination that an electronic signature is required.

1 19. The computer program of claim 18 wherein the electronic record
2 is stored in a common repository of electronic records that provides an audit trail that
3 cannot be altered or disabled by users of the system.

1 20. The computer program of claim 19 wherein the electronic record
2 comprises unstructured data in a character large object (CLOB) format.

1 21. The computer program of claim 20 wherein the unstructured data
2 comprises a well-formed XML document stored within a column of a table stored in the
3 database.

1 22. The computer program of claim 21 wherein fields of the
2 electronic record are filled with XML data based on a predefined mapping to multiple
3 data sources.

1 23. The computer program of claim 18 wherein the computer
2 program further comprises code for obtaining and verifying the electronic signature,
3 and thereafter, marking the electronic record as signed.

1 24. The method of program 23 wherein the computer program
2 further comprises code for initially marking the electronic record as unsigned by setting
3 an appropriate attribute associated with a database table in which at least part of the
4 record is stored.

1 25. A method of collecting an electronic signature for an electronic
2 record stored in a database, the method comprising:

3 automatically creating an electronic record in response to the occurrence
4 of a predetermined event, wherein the electronic record comprises unstructured, well-
5 formed XML data stored in a character large-object (CLOB) format;
6 storing an instance of the electronic record in a common repository of
7 electronic records that provides an audit trail that cannot be altered or disabled by users
8 of the system;
9 executing a rule associated with the electronic record to determine
10 whether an electronic signature is required to connote review and/or approval of the
11 electronic record; and
12 if execution of the rule results in a determination that an electronic
13 signature is required, marking the instance of the electronic record as unsigned;
14 requesting the electronic signature;
15 after obtaining the electronic signature, verifying its authenticity; and
16 if the electronic signature is verified as authentic, marking the electronic
17 record as signed.